

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0060], bridging pages 24-26, with the following amended paragraph:

[0060] FIG. 1 illustrates an example of a configuration of equipment according to the present invention. The equipment according to this embodiment includes a control unit 1-1 comprising an electronic computer represented by a personal computer or a work station; a display device 2-1 connected to the controller; a laser diode 6-1 with a peak wavelength 6-2 at the wavelength λ_1 and a laser diode with a peak wavelength at the wavelength λ_2 ; monitor photodiodes 7-1 and 7-2 provided close to the laser diodes 6-1 and 6-2, respectively; oscillators 3-1 and 3-2 for generating signals for modulating the two laser diodes at different frequencies, respectively; amplifiers 14-1 and 14-2 for varying an amplitude of an oscillator signal and a DC bias level; APC (auto power control, automatic light volume control) circuits 4-1, 4-2 for controlling a current value loaded to the laser diodes with driver circuits 5-1 and 5-2 so that a signal level from the monitor photodiode is the same as that of a signal from the oscillator; a light mixer 8-1 for mixing light in two wavelength ranges different in peak wavelength from each other; a light irradiating unit 9-1 for irradiating a head skin of a trial subject 10-1 with light from the light ~~mixer~~⁸⁰¹_{mixer} 8-1 via an optical fiber; a light receiving unit 9-2 provided so that a tip of the optical fiber for detection of light is located at a position away from the light irradiating unit (30 mm away in this embodiment); light detectors 11-1 capable of detecting each light; lock-in amplifiers 12-1 and 12-2 for receiving modulated frequencies from the oscillators as reference signals; and an analog/digital converter for converting a signal for transmitted light in each wavelength range outputted from the lock-in

amplifier to an analog signal. Measurement is performed at a substantially intermediate position between the light irradiating unit 9-1 and the light receiving unit 9-2.